WE CLAIM:

1. A method for bit stream decoding of a bit stream having a number of consecutive samples, the method comprising the steps of:

    a) defining a detection window having a number of samples;

    b) positioning said detection window at certain positions on the bit stream in order to subtend certain samples with respective sample values;

    c) applying a majority voting to said sample values within said detection window;

    d) decoding the bit stream in dependence on the results of step c); and

    e) generating respective bit values following step d).

2. The method of claim 1, wherein said detection window comprises an odd number of samples.

3. The method of claim 1, wherein said detection window is positioned at an expected edge between two bit cells of the bit stream to overlap at least one sample of a first bit cell and at least one sample of a subsequent bit cell, having respective sample values, in order to perform bit edge detection.

4. The method of claim 1, wherein said detection window is centered on an expected center of a bit cell of the bit stream to only overlap samples of said bit cell for detecting a bit value of said bit cell.

5. The method of claim 4, wherein glitches or spikes in the bit stream are filtering out.

6. The method of claim 4, wherein said detection window is positioned on an expected center of said bit cell in dependence on a predetermined offset-parameter and in dependence on a predetermined parameter specifying a number of samples in said detection window.

7. A computer program for execution on at least one of a computer and a microprocessor, wherein the computer program is programmed to execute the method of claim 1.

8. The computer program of claim 7, wherein the computer program is stored in at least one of a read-only-memory (ROM), a random-access-memory (RAM), and a flash-memory.

9. A device for decoding a bit stream having a number of consecutive samples, the

device comprising:

means for positioning a predefined detection window at certain positions in the bit stream, the detection window being predefined to overlap a number of samples, said detection window being positioned in such a way as to span certain samples with respective sample values;

means for applying majority voting to said sample values contained within said detection window;

means for decoding the bit stream in dependence on said majority voting; and

means for generating respective bit values in response to said decoding of the bit stream.

10. The device of claim 9, wherein said detection window comprises an odd number of samples.

11. The device of claim 9, wherein said detection window is positioned at an expected edge between two bit cells of the bit stream to overlap at least one sample of a first bit cell and at least one sample of a subsequent bit cell, having respective sample values, in order to perform bit edge detection.

12. The device of claim 9, wherein said detection window is centered on an expected center of a bit cell of the bit stream to only overlap samples of said bit cell for detecting a bit value of said bit cell.

13. The device of claim 12, wherein glitches or spikes in the bit stream are filtering out.

14. The device of claim 12, wherein said detection window is positioned at an expected center of said bit cell according to a predetermined offset-parameter and according to a predetermined parameter specifying a number of samples in said detection window.

15. One of a number of nodes of a communication system, the nodes being connected to a communication media for transmitting data among the nodes, the data being transmitted across the communication media in the form of a bit stream, the bit stream comprising a number of consecutive samples, wherein the node comprises a bit stream decoding device according to claim 9 for decoding the bit stream received from the communication media.

16. A computing unit programmed for carrying out the method of claim 1.

17. A data storage medium having machine encoded instructions for executing the

method of claim 1.